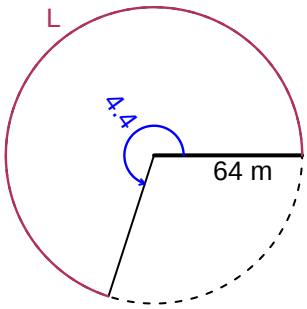
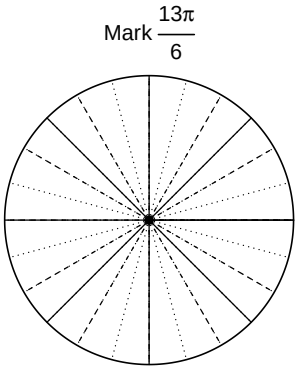
Name: Date:

u16we (Practice v1)

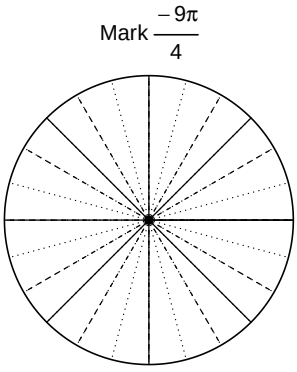
1. In the figure below, we see a circle and a central angle that subtends an arc. The radius is 64 meters. The angle measure is 4.4 radians. How long is the arc in meters?



2. Consider angles $\frac{13\pi}{6}$ and $\frac{-9\pi}{4}$. For each angle, use a spiral with an arrow head to **mark** the angle on a circle below in standard position. Then, find **exact** expressions for $\sin\left(\frac{13\pi}{6}\right)$ and $\cos\left(\frac{-9\pi}{4}\right)$ by using a unit circle (provided separately).



Find $\sin(13\pi/6)$



Find $\cos(-9\pi/4)$